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EXAMINER

PENG, KUO LIANG

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. The Applicants' amendment under 37 C.F.R. 1.111 filed December 5, 2008 is acknowledged. Claims 2-5, 7-8, 10-11, 13-20, 22, 24-37 and 44-51 are deleted. Claim 39 is amended. Claims 52-59 are added. Now, Claims 1, 6, 9, 12, 21, 23, 38-43 and 52-59 are pending.

2. The text of those sections of Title 35, U.S. code not included in this action can be found in prior Office Action(s).

Claim Objections

3. Claim 59 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

In Claim 59, without reciting the amounts for the components, it does not further limit the subject matter of Claim 58.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 56 and 58-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 56 (page 6, line 3), “optionally” is inconsistent with “0.05 to 38 percent by weight”.

In Claim 58 (page 7, line 7), “optionally” is inconsistent with “0.04-36.4 weight percent”.

In Claims 58 (line 7) and 59 (line 3), it is not clear as to what “one component” refers to.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 54 and 56-59 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In Claims 54 (line 2), 56 (page 6, line 7) and 57 (page 7, line 6), Examiner is not able to find the basis of “no more than 1 percent by weight”.

In Claims 56 (page 6, lines 3-4) and 57 (page 7, line 4), Examiner is not able to find the basis of the catalyst being an optional component.

Claim Rejections - 35 USC § 102 and 103

8. Claims 1, 6, 9, 12, 38, 40, 41-43, 52 and 55-56 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Giraud (WO 01/40417).

The following column and line numbers are based on Giraud's U.S. equivalent, US 6 825 153.

Giraud discloses a composition comprising components a) to f) and optionally components g) and h) (both are hydroxyl end-capped polysiloxanes). Note that components b) and c) can contain amine moiety, which are thus considered as bases. (col. 2, lines 32-67, col. 4, lines 9-11 and col. 6, line 65 to col.

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7, line 32, col. 9, line 57 to col. 10, line 67) Also, the aqueous styrene-acrylate latex has a pH value of 8. (Table 2) Apparently, this aqueous latex should contain certain **basic material** so that as a whole, the aqueous latex has a pH value of 8. Notably, this basic material is not a functional siloxane, a crosslinker or a thickening agent. A thickener can be used. (col. 11, lines 5-12) Giraud is silent on the pH of the composition, the amount of VOC, the shelf life, the surface transfer, etc. However, the reference discloses all the limitations of a claim except the properties, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). The preamble “mold release composition” is merely an intended use, which does not carry any weight of patentability.

For Applicants’ argument (Remarks, page 9, 2nd paragraph from bottom to page 10, 1st paragraph), Examiner disagrees because the components b) and c) contain **aminoalkyl** groups. Examiner takes Official notice that one of ordinary skill in the art would appreciate that any compounds having aminoalkyl groups are considered as organic **bases**.

For Applicants' argument (Remarks, page 10, 2nd paragraph), the pH value of a composition typically depends on the functional groups on the components therein. Notably, all the components in the composition are relatively neutral, except the foregoing components b) and c) (as well as component g)) containing **aminoalkyl** groups are basic. Therefore, Examiner has reasonable basis to believe pH value of the composition, as a whole, should fall within the claimed range (i.e., pH = 7 to 11). Especially, the pH range of 7 to 11 is very broad in that it covers anywhere from **neutral** to almost the **whole** basic range. (Emphasis added)

For Applicants' argument (page 10, last paragraph to page 11, 2nd paragraph), Examiner disagrees because of the following reasons: First, Amine-containing functional group, in addition to alkoxy-, ester-, amide-, epoxide- and ureido-containing functional groups on the polysiloxane of component b) are **specifically** taught in Giraud's disclosure. (col. 4, lines 3-54) The employment of an amine-containing polysiloxane is only **one** out of **six** possibilities. Therefore, one of ordinary skill in the art would immediately envisage the amine-containing polysiloxane as component b). Applicants' assertion (a vast number of possible siloxane resin molecules) is apparently **not persuasive**. Second, the crosslinking agent c) can contain amino, epoxy, thiol or ester functional group. (col. 5, lines 53-60) Again, an amino functional group-containing crosslinking agent c) is merely

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one out of **four** possibilities. As such, one of ordinary skill in the art would immediately envisage the amine-containing crosslinking agent as component c). Applicants' assertion (a vast number of possible silane crosslinking agent molecules) is apparently **not persuasive**, either. Third, the water-soluble crosslinking agent g) can **preferably** contain an amine-functional group. (col. 8, line 63 to col. 9, line 28) Notably, any of the foregoing components can read on the claimed base.

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giraud.

Giraud discloses a composition, *supra*, which is incorporated herein by reference. Giraud is silent on the claimed viscosity. However, the viscosity of the composition can affect the coating process, thickness per coating, etc. As such, the viscosity is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a composition with whatever viscosity through routine experimentation in order to afford a coating with desired properties. Especially, Applicants do not show the criticality of the viscosity. See MPEP 2144.05 (II).

For Applicants' argument (Remarks, page 12, 1st paragraph), Examiner's position, *supra*, is applicable here.

10. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Giraud and further as evidenced by Hyde (US 2 891 920) and Silicones (Freeman, London-Iliffe Books, Ltd. (1962))

Giraud discloses a composition, *supra*, which is incorporated herein by reference. Giraud further teaches that the polysiloxanes in Hyde can be employed as component h) (col. 10, lines 62-67). Thus, Hyde teaches the polysiloxanes having viscosities falling within the claimed range. (col. 4, lines 65-72 and Examples)

For Applicants' argument (Remarks, page 12, 3rd paragraph), Examiner's position, *supra*, is applicable here.

For Applicants' argument (Remarks, page 12, 4th and 5th paragraphs), there was a typographical error in the previous Office action. The word "viscosities" should have read "molecular weight". Examiner regrets for causing any confusion. Nonetheless, Hyde (US 2 891 920) does teach polysiloxanes having the molecular weight falling within the claimed range. For instance, the dimethylpolysiloxane

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can have a viscosity of 3,000 cs. (Example 1) In addition, Freeman teaches the relationship between number of repeating units (n) and the viscosity (η , in cs) of a typical polydimethylsiloxane can be represented by the equation

$$\text{Log } \eta = 0.1 n^{1/2} + 1.1 \quad (\text{page 27}).$$

As such, the foregoing polydimethylsiloxane can have about 565 repeating units that correspond to a molecular weight of about 42,000 because the formula weight of a dimethylsiloxo unit is 74.

11. Claim 39 is rejected under 35 U.S.C. 103(a) as obvious over Giraud.

Giraud discloses a composition, *supra*, which is incorporated herein by reference. Giraud is silent on the amounts of the components set forth in the instant claim. However, the amounts of the components will affect the viscosity and/or the curing rate of the composition and/or the final properties of the cured product. As such, the amounts are Result-Effective variables. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a composition with whatever amounts of the ingredients through routine experimentation in order to afford a composition with desired viscosity, curing rate and properties. Especially, Applicants do not show the criticality of the amounts. See MPEP 2144.05 (II).

For Applicants' argument (Remarks, page 14, 2nd to 4th paragraphs), Examiner disagrees. Giraud discloses the amounts of component h), component c), component d) and component e) (corresponding to the claimed silanol-functional siloxane, alkoxy-functional crosslinker/base, catalyst and thickening agent, respectively) in amounts of 1 to 10 wt%, 0.5 to 5 wt%, 0.1 to 2 parts by weight and 0.11 wt%, respectively. (col. 7, lines 33-37, col. 8, lines 5-9, col. 11, lines 1-4 and Table 1) Notably, the foregoing ranges substantially **overlap** with the claimed ones. Therefore, a *prima facie* case of obviousness exists. See MPEP 2144.05. Since the composition, as a whole, should fall within the claimed range (i.e., pH = 7 to 11), *supra*, and the fact that component e) functions as a thickening agent, Examiner has reasonable basis to believe component e) is activatable at the claimed pH range. Furthermore, Examiner does not believe an affidavit conforming to 37 C.F.R. 1.104(d)(2) is necessary because the functions of "catalyst", "crosslinking agent" and "thickening agent" are self-explained themselves, i.e., facilitating a chemical reaction, crosslinking a chemical composition and thickening a composition, respectively. Therefore, the amounts thereof would obviously affect the rate of chemical reaction, crosslinking density of the cured composition and the viscosity of the composition, respectively.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571)

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272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

March 4, 2009

/Kuo-Liang Peng/
Primary Examiner, Art Unit 1796